

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Original): A process for preparing at least one olefin having from 8 to 12 carbon atoms from at least one olefin having from 4 to 6 carbon atoms by means of a four-stage synthesis, which comprises

- a) hydroformylating at least one starting olefin in the first process step,
- b) hydrogenating the at least one aldehyde obtained in the first step a) to form the corresponding alcohol,
- c) preparing at least one 1-olefin by elimination of water from the at least one alcohol obtained in the second process step b) and
- d) obtaining at least one olefin by metathesis with elimination of ethylene from the at least one 1-olefin(s) obtained in the third process step c).

Claim 2 (Original): The process as claimed in claim 1,
wherein a mixture of olefins having from 4 to 6 carbon atoms is used and a mixture of olefins having from 8 to 12 carbon atoms is obtained.

Claim 3 (Currently Amended): The process as claimed in claim 1 [[or 2]],
wherein a nickel, copper, copper/nickel, copper/chromium, copper/chromium/nickel, zinc/chromium, nickel/molybdenum catalyst is used as catalyst in the second process step b).

Claim 4 (Currently Amended): The process as claimed in [[at least one of claims 1 to 3]] claim 1,

wherein the elimination of water in the third process step c) is carried out continuously over a solid catalyst which consists formally of aluminum oxide and barium oxide.

Claim 5 (Currently Amended): The process as claimed in [[at least one of claims 1 to 4]] claim 1,

wherein a rhenium catalyst comprising Re_2O_7 on $\gamma\text{-Al}_2\text{O}_3$ or on mixed supports selected from among $\text{SiO}_2/\text{Al}_2\text{O}_3$, $\text{B}_2\text{O}_3/\text{SiO}_2/\text{Al}_2\text{O}_3$ or $\text{Fe}_2\text{O}_3/\text{Al}_2\text{O}_3$ is used in the fourth process step d).

Claim 6 (Currently Amended): The process as claimed in ~~at least one of claims 1 to 5~~ claim 1,

wherein a hydrocarbon stream comprising or consisting of isobutene and linear butenes is used as starting material in process step a).

Claim 7 (Currently Amended): The process as claimed in ~~at least one of claims 1 to 6~~ claim 1,

wherein a C_4 fraction selected from among raffinate I, selectively hydrogenated C_4 fraction from a cracker, C_4 fractions from FCC plants or C_4 -olefins prepared by the Fischer-Tropsch synthesis is used as starting material.

Claim 8 (Currently Amended): The process as claimed in ~~at least one of claims 1 to 7~~ claim 7,

wherein industrial C_4 fractions having an isobutene content of greater than 3% by weight are used as starting material.

Claim 9 (Currently Amended): The process as claimed in ~~at least one of claims 6 to 8~~
claim 6,

wherein 3-methyl-1-butene is separated off from the 1-olefin fraction comprising
olefins having 5 carbon atoms which is obtained after the third process step c).

Claim 10 (Currently Amended): A mixture which comprises at least one olefin
having from 8 to 12 carbon atoms and has been prepared by a process as claimed in ~~any of~~
~~claims 1 to 9~~ claim 1.

Claim 11 (Currently Amended): Isooctene prepared by a process as claimed in ~~any of~~
~~claims 1 to 9~~ claim 1 using a C₄ fraction having an isobutene content of greater than 3% by
weight as starting material.

Claim 12 (Currently Amended): The ~~use of~~ method of using a mixture as claimed in
~~claim 10 or of isooctene as claimed in claim 11~~ for preparing alcohols and/or aldehydes.

Claim 13 (Currently Amended): The ~~[[use]]~~ method of using a mixture as claimed in
claim 12 for preparing plasticizer alcohols.

Claim 14 (Currently Amended): The ~~[[use]]~~ method of using a mixture as claimed in
claim 12 for preparing isononanol.